

**REMARKS**

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejection present in the outstanding Office Action in light of the following remarks.

In the Office Action dated March 6, 2007, Claims 1-13 were pending. Of these claims, Claims 1 and 13 are independent claims; the remaining claims are dependent claims. Claims 1-13 have been rejected and the rejection made final. Applicants intend no change in the scope of the claims by the changes made by these amendments. It should also be noted these amendments are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution.

**Rejections under 35 U.S.C. § 103(a)**

Claims 1-13 stand rejected under 35 USC § 103(a) as obvious over Herz et al. (hereinafter "Herz") in view of Dahm et al. (hereinafter "Dahm"). Specifically the Office asserted that "[i]t would have been obvious ... implement Dahm's defunct threshold in Herz's customized price and promotion system. One would be motivated to set up a threshold value as taught in Dahm in order to predict a customer who is most likely to churn or discontinue the service, and provide a proper offer to retain such customers. It would be obvious to use Herz's profile attributes, such as the last interaction of the customer with the web site, and set a threshold value to determine the probability that the customer would become a defunct." Reconsideration and withdrawal of the present rejections are hereby respectfully requested.

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A 35 USC 103(a) rejection requires that the combined cited references provide both the motivation to combine the references and an expectation of success. Not only is there no motivation to combine the references, no expectation of success, but actually combining the references would not produce the claimed invention. Thus, the claimed invention is patentable over the combined references and the state of the art.

The outstanding Office Action takes the position that Herz teaches providing a promotion to the customer based on customer behavior. However, there is no teaching or suggestion that these promotions offered to the customer by Herz are based on real-time learning from promotional experimentation of various promotions offered to various *other* consumers. Thus, the instantly claimed invention does not solely focus on segmenting customers into types based on their prior behavior, but rather additionally contemplates carrying out real-time experimentation to determine which promotional offers are the most likely to succeed by specifically taking into account *the current market conditions*. *Specification*, page 19 at [0091]. That is, the instantly claimed invention's real-time experimentation ensures that the promotion "is dynamically optimized to regularly compensate for market changes." *Id.* It is respectfully submitted that Herz et al. clearly falls short of teaching certain attributes of the present invention in that, *inter alia*, it does not disclose specifying a range of offers to be included in a set of promotions wherein the offers include optimal advertisements determined from real time learning from dynamic analyses of promotional experimentation.

The deficiencies of Herz, discussed above, cannot be accounted for by Dahm. Neither Herz nor Dahm teach such a dynamic optimization technique wherein real-time learning is utilized to optimize the promotions offered to the customers.

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Additionally, the Examiner asserts that the deficiencies of Herz can be remedied by combination with Dahm because Dahm teaches the use of a threshold value in effecting customer retention. *Office Action*, page 5. Applicants' respectfully disagree. The Examiner's attention is directed to the very different nature, not taught by either Herz or Dahm, in which customers are retained by the instantly claimed invention.

The instantly claimed invention utilizes a retention mechanism wherein a former customer's absence is utilized in calculating a probability that the former customer has become defunct. *Specification*, page 16 at [0080]. In both Herz and Dahm, the customers are already present at the site (or have an existing service agreement with the provider, as in Dahm).

In Herz, the customer's profile is loaded at login, clearly indicating that the customer has already returned to the web site. *Herz* at [0035]. Thus, Herz is not concerned at all with teaching methods of customer retention, but merely utilizes data regarding the frequency of visits, including time since the last visit, to offer promotional offers now that the customer has returned to the site. *Id* at [0035]; [0037].

In Dahm, paradoxically, the user that has the most contact with the provider is the customer sought out by Dahm's threshold calculation. *Dahm*, Col. 1, line 49-52. Thus Dahm, stating "[f]or example, subscribers with high monthly usage are much more likely to churn [i.e. discontinue use] than subscribers who use their phones sparingly", teaches away from calculating a threshold value based on lack of use or contact with a provider or site. *Id*. Dahm considers those who use the service infrequently as less likely to need a retention promotion offer and calculates a threshold value accordingly.

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In stark contrast to both of these teachings cited by the Examiner, the instantly claimed invention calculates a threshold value (not contemplated by Herz) using a probability based on infrequency of contact (the opposite of Dahm) and offers promotions to users based on, *inter alia*, their lack of contact. Furthermore, the instantly claimed invention is capable of proactively seeking out customers who have not contacted the site by, *inter alia*, offering promotions via email. Thus, even if a user is not currently at the site (as in Herz) or does not have a service agreement (as in Dahm), the instantly claimed invention is capable of offering promotions to absent customers in hope of retaining them (e.g. stimulating them to contact the site once again).

In summary, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections because neither Herz nor Dahm teach, either alone or in combination, all the recited elements of the instantly claimed invention. Furthermore, combining Herz with Dahm would not produce the instantly claimed invention. Therefore, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

**Rejections under 35 U.S.C. § 112, First Paragraph**

Claims 1-13 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description of the invention requirement. Applicants respectfully request reconsideration and withdrawal of these rejections.

The recited element "wherein the threshold is dependent upon an operator's choice of which economic value to maximize" is clearly described in the specification. Applicants' direct the Examiner's attention to the instant specification at [0082] wherein "the merchant may decide that when the likelihood of a customer not returning to interact

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with the site exceeds [the threshold chosen], the merchant will take steps to retain that customer rather than permit the customer to become defunct." Of course, the merchant may not choose to set the threshold at that level because an economic value to be maximized dictates that the customer be given more or less time to interact with the site before declaring the customer to be defunct. *Id* at [0080]. The specification makes it clear that "managers of the firm may explicitly state a time interval by which if a customer had failed to interact with the site, the customer is deemed to be defunct. *Id*. This gives the merchant added flexibility wherein more promotions (i.e. offered at lower threshold values) can be offered to, e.g. improve short term profits. The merchant could likewise set a higher threshold value (i.e. give the customer more time to interact with the site before becoming defunct) in order to minimize customer retention costs.

The Examiner correctly points out that the customer purchase amount can be one criterion influencing the decision of where to place the threshold for certain customers. *Office Action*, page 3. However, this is only one example of many economic value based factors that can be taken into consideration by the operator in determining where the threshold should be. The operator may decide that higher retention costs (i.e. lower threshold values for offering promotions) are appropriate for customers who spend more money, as that market is more important than customers in another segment of the market. Applicants therefore respectfully request reconsideration and withdrawal of these outstanding rejections.

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**New Claims**

Applicants' have added new claims 14-19 to more clearly and explicitly claim some of the features of the previously presented independent claims, as taught by the specification. Claims 14-16 are directed to dependent method claims; claims 17-19 are directed to corresponding, dependent storage apparatus claims. Claim 14 is drawn to the method wherein "sampling data to obtain information about current market conditions" is performed as part of the real-time learning process. Claim 15 is drawn to the method wherein proactive "offering promotions to customers via email messages" is employed to encourage customers, absent past some threshold time and predicted as likely to become defunct, are encouraged to return to the site. Claim 16 is drawn to the method wherein the "threshold value selecting a defunct threshold so as to minimize the cost of customer retention" is utilized at the operators discretion.

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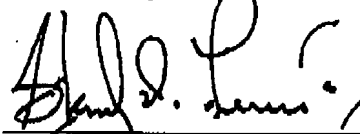
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**Conclusion**

In summary, it is respectfully submitted that the instant application, including Claims 1-13, are presently in condition for allowance. Notice to the effect is hereby earnestly solicited. Applicants' undersigned attorney would welcome further discussion with the Office in the event there are any further issues in this application.

Respectfully submitted,



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Stanley D. Ference III  
Registration No. 33,879

**Customer No. 35195**  
**FERENCE & ASSOCIATES LLC**  
409 Broad Street  
Pittsburgh, Pennsylvania 15143  
(412) 741-8400  
(412) 741-9292 - Facsimile

Attorneys for Applicants